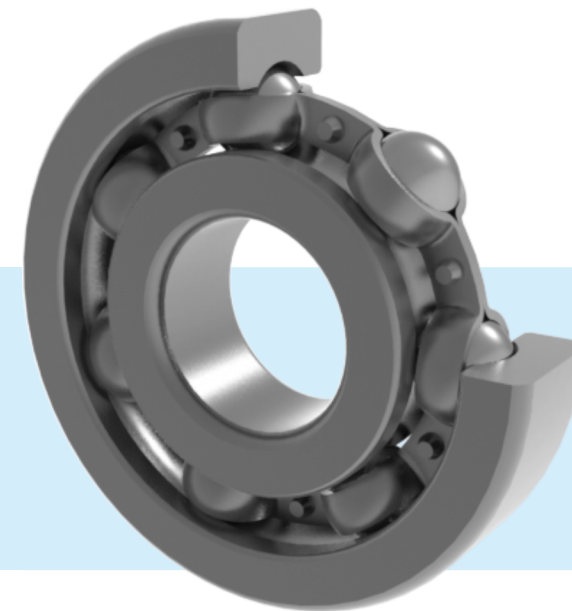


Single row deep groove ball bearing



Single row deep groove ball bearing

Deep groove ball bearing

1. Outline

Deep groove ball bearing is one of the most common rolling bearings. The deep-grooved raceway and the excellent conformity between the raceway and steel balls make the deep groove ball bearing capable of carrying axial loads in both directions in addition to radial loads, even under high-speed conditions.

The friction coefficient of deep groove ball bearings is very low, and their speed limit is very high. The shielded bearings can work without re-lubrication and maintenance.

Except basic types, deep groove ball bearings have various structures, such as:

- Deep groove ball bearing with shields;
- Deep groove ball bearing with rubber seals;
- Deep groove ball bearing with snap ring;
- Deep groove ball bearing with filling slot;
- Double row deep groove ball bearing.

1) Deep groove ball bearing with shields

The function of the dust cover is to prevent grease leakage and foreign matter intrusion in the bearing. Dust covers are divided into one-sided and two-sided structure.

Bearings with shields can be used to situations requiring low friction torque and in high temperature but are difficult for re-lubrication and monitoring lubricant condition. The grease amount for each bearing is usually 1/4 ~ 1/3 of the available space of the bearing, and can also be varied according to the customer's requirements. The grease fill can usually ensure bearing operation at temperatures ranging from -40 to + 120°C. C&U is capable of providing solutions if there are higher requirements for the bearing.

Bearings with shields can work for a long time effectively after filled with grease, and there is no need for replenishment during this period.

Bearings with shields are normally used in small and medium generators, both ends of the rotors of electrical motors, automobiles, tractors, air conditioners, fans, etc., as well as the situations where there are special requirements for the noise and vibration of the bearings.

2) Deep groove ball bearing with rubber seals

Deep groove ball bearings with seals fall into contact type and non-contact type, and also single-side type and double-side type. Depending on the application, contact seals can be designed and manufactured into light contact type, medium contact type and heavy contact type.

The performance, lubrication, and usage of bearings with seals are identical with those of deep groove ball bearings with shields. The difference is that the clearance between the shield and the inner ring of the bearing is larger, while that between the non-contact seal and inner ring of the bearing is smaller. There is no clearance between the sealing lip and the inner ring of a bearing with a contact seal, which ensures a good sealing effect, but also increases the friction.

Small-size deep groove ball bearings of 60 and 62 series are often used in situations where low noise is required. Requirements for low noise and low vibration can be raised for both open bearings and shielded bearings (bearings with shields or seals) when they are specified.

3) Deep groove ball bearings with snap ring grooves and snap rings

The structure with snap ring groove, snap ring or flange on the outer ring can realize axial location and simplify the mounting structure of housing.

Deep groove ball bearings with snap ring grooves and snap rings are often applied to automobiles, tractors etc.










4) Deep groove ball bearing with filling slot

The boundary dimensions of deep groove ball bearings with filling slot are identical with those of deep groove ball bearings of series 62 or 63. There are filling slots on both the inner and outer rings, so the number of steel balls are more than that of normal deep groove ball bearings and the dynamic load rating is 20 ~ 35% higher.

Due to the filling slot, they are not suitable for the situations with high axial load. The condition that the dynamic equivalent radial load $P_r < 0.5C_{0r}$ should be met when used in combined loads where radial loads are the primary component.

5) Double row deep groove ball bearing

Please contact C&U for more information.

| | | |
|--|---|--|
| Basic structure Open |  | The most popular basic structure, expressed by basic number, e.g. 6204 |
| Structure of bearing with snap ring groove |  | With a "N" after the number, e.g. 6204N |
| Structure of bearing with snap ring |  | With a "NR" after the number, e.g. 6208NR |
| Structure of bearing with flange |  | A "F" is added before the code, usually for miniature bearing. e.g. F683 |
| Shielded seal structure |  | With a "Z" after the code, "Z" for single-side type and "2Z" for double-side type, e.g. 6204-Z, 6204-2Z |
| Non-contact seal structure |  | With a "RZ" after the code, "RZ" for single-side type and "2RZ" for double-side type, e.g. 6204-RZ, 6204-2RZ |
| Contact seal structure |  | With a "RS" after the code, "RS" for single-side type and "2RS" for double-side type, e.g. 6204-RS, 6204-2RS |
| Heavy load deep groove ball bearing |  | Bearing load capacity can be increased by increasing the number of steel balls for non-standard bearings, with an "E" after the code, e.g. 6210E |
| Double row deep groove ball bearing |  | Normally two series, 42XX and 43XX, e.g. 4205, 4305 |

2. Seal

Performance comparison of deep groove ball bearing with seals

| Features | Types | With seals | | | |
|-----------------------------------|-----------------|---|------------------|--------------------------|--------------------|
| | | With shield | Non-contact type | Contact type | Light contact type |
| | | Non-contact type | | | |
| | | 2Z | 2RZ | 2RS | 2RSL |
| Friction torque | Low | Low | Medium | Lower than contact type | |
| High performance | Better | Good | Limited | Better than contact type | |
| Seal performance of grease | Better | Better than ZZ type | Excellent | Excellent | |
| Dust proof | Better | Better than ZZ type, can also be used where there are much powder | Excellent | Excellent | |
| Water proof | Not recommended | Better than ZZ type, inferior to 2RS | Excellent | Good | |
| Temperature range for application | | -30°C~+110°C | -30°C~+110°C | -30°C~+110°C | |

Note: Here is the applicable temperature for standard bearings. Changes for the types of lubricating grease and material of seals can expand the range.

3. Dynamic equivalent radial load

$$P_r = XF_r + YF_a$$

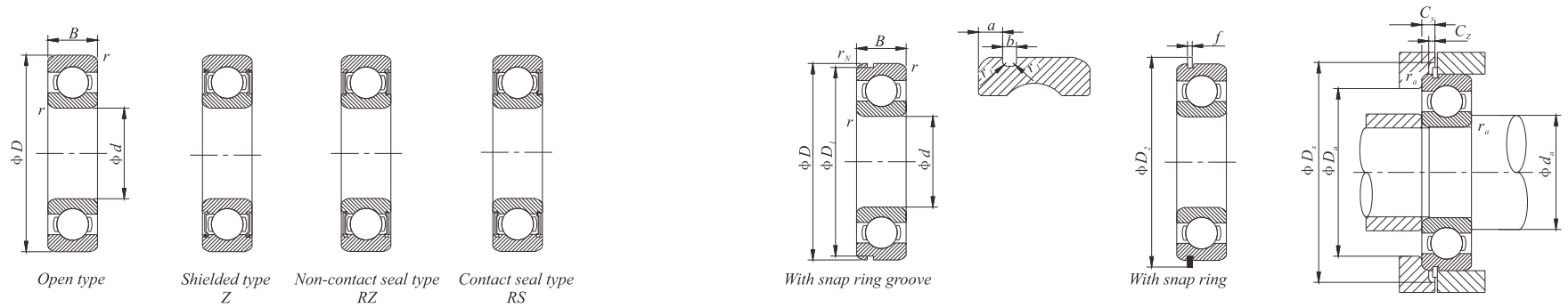
The values of X and Y are determined by the ratio of the axial load F_a and basic static load rating the bearing. Please refer to the following table for the coefficients of X and Y:

| Relative axial load $\frac{f_0 F_a}{C_{0r}}$ | Single row bearing | | | | e |
|---|--------------------------|---|-----------------------|------|------|
| | $\frac{F_a}{F_r} \leq e$ | | $\frac{F_a}{F_r} > e$ | | |
| | X | Y | X | Y | |
| 0.172 | 1 | 0 | 0.56 | 2.3 | 0.19 |
| 0.345 | | | | 1.99 | 0.22 |
| 0.689 | | | | 1.71 | 0.26 |
| 1.03 | | | | 1.55 | 0.28 |
| 1.38 | | | | 1.45 | 0.3 |
| 2.07 | | | | 1.31 | 0.34 |
| 3.45 | | | | 1.15 | 0.38 |
| 5.17 | | | | 1.04 | 0.42 |
| 6.89 | | | | 1 | 0.44 |

4. Static equivalent radial load

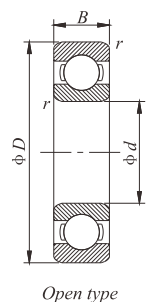
$$P_{0r} = 0.6F_r + 0.5F_a$$

When $P_{0r} < F_r$, take $P_{0r} = F_r$

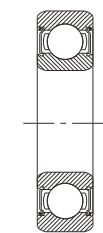


d 10~17 mm

| Boundary dimensions (mm) | Basic load ratings (kN) | | Limiting speeds(r/min) | | | Nominal numbers | Nominal numbers (old) | Dimension of snap ring groove (mm) | | | | | Dimension of snap ring(mm) | | Mounting dimensions (mm) | | | | | | Reference mass (kg) | | |
|--------------------------|-------------------------|----------|------------------------|----------------|------------------|-----------------|-----------------------|------------------------------------|------|------|-------|----------------|----------------------------|----------------|--------------------------|------|----------------|----------------|----------------|----------------|---------------------|----------------|----------------|
| | | | Grease | Oil | Non-contact type | | | Contact type | Open | a | b | D ₁ | r ₁ | r _N | D ₂ | f | d _a | D _a | r _a | D _x | | C _y | C _z |
| <i>d</i> | <i>D</i> | <i>B</i> | <i>r</i> (Min) | C _r | C _{or} | | | Max | Min | Max | Max | Min | Max | Max | Min | Max | Max | Min | Max | Max | Max | | |
| 10 | 15 | 4 | 0.1 | 0.86 | 0.44 | 10,000 | — | 12,000 | — | — | — | — | — | — | — | 10.8 | — | 14.2 | 0.1 | — | — | — | 0.002 |
| | 19 | 5 | 0.3 | 1.83 | 0.93 | 32,000 | 24,000 | 38,000 | — | — | — | — | — | — | — | 12 | 12.5 | 17 | 0.3 | — | — | — | 0.005 |
| | 22 | 6 | 0.3 | 2.70 | 1.27 | 30,000 | 21,000 | 36,000 | 1.05 | 0.8 | 20.8 | 0.2 | 0.3 | 24.8 | 0.7 | 12 | 13 | 20 | 0.3 | 25.5 | 1.5 | 0.7 | 0.009 |
| | 26 | 8 | 0.3 | 4.55 | 1.97 | 29,000 | 21,000 | 34,000 | — | — | — | — | — | — | — | 12 | 13.5 | 24 | 0.3 | — | — | — | 0.018 |
| | 30 | 9 | 0.6 | 5.10 | 2.39 | 25,000 | 18,000 | 30,000 | 2.06 | 1.35 | 28.17 | 0.4 | 0.5 | 34.7 | 1.12 | 14 | 16 | 26 | 0.6 | 35.5 | 2.9 | 1.2 | 0.032 |
| | 35 | 11 | 0.6 | 8.10 | 3.45 | 23,000 | 16,000 | 27,000 | 2.06 | 1.35 | 33.17 | 0.4 | 0.5 | 39.7 | 1.12 | 14 | 17 | 31 | 0.6 | 40.5 | 2.9 | 1.2 | 0.053 |
| | 62 | 17 | 1.1 | 28.80 | 10.60 | 14,000 | — | 16,000 | — | — | — | — | — | — | — | 23.5 | — | 55.5 | 1 | — | — | — | 0.270 |
| 12 | 18 | 4 | 0.2 | 1.10 | 0.70 | 8,300 | — | 9,500 | — | — | — | — | — | — | — | 13.6 | 13.8 | 16.4 | 0.2 | — | — | — | 0.002 |
| | 21 | 5 | 0.3 | 1.92 | 1.04 | 29,000 | 20,000 | 35,000 | — | — | — | — | — | — | — | 14 | 14.5 | 19 | 0.3 | — | — | — | 0.006 |
| | 24 | 6 | 0.3 | 2.89 | 1.46 | 27,000 | 19,000 | 32,000 | 1.05 | 0.8 | 22.8 | 0.2 | 0.3 | 26.8 | 0.7 | 14 | 15 | 22 | 0.3 | 27.5 | 1.5 | 0.7 | 0.011 |
| | 28 | 7 | 0.3 | 5.10 | 2.37 | 26,000 | — | 30,000 | — | — | — | — | — | — | — | 14 | — | 26 | 0.3 | — | — | — | 0.019 |
| | 28 | 8 | 0.3 | 5.10 | 2.37 | 26,000 | 18,000 | 30,000 | — | — | — | — | — | — | — | 14 | 16 | 26 | 0.3 | — | — | — | 0.022 |
| | 32 | 10 | 0.6 | 6.82 | 3.06 | 22,000 | 16,000 | 26,000 | 2.06 | 1.35 | 30.15 | 0.4 | 0.5 | 36.7 | 1.12 | 16 | 17 | 28 | 0.6 | 37.5 | 2.9 | 1.2 | 0.037 |
| | 37 | 12 | 1 | 9.70 | 4.20 | 20,000 | 15,000 | 24,000 | 2.06 | 1.35 | 34.77 | 0.4 | 0.5 | 41.3 | 1.12 | 17 | 18.5 | 32 | 1 | 42 | 2.9 | 1.2 | 0.060 |
| 15 | 21 | 4 | 0.2 | 0.94 | 0.58 | 6,600 | — | 7,600 | — | — | — | — | — | — | — | 16.6 | 16.8 | 19.4 | 0.2 | — | — | — | 0.003 |
| | 24 | 5 | 0.3 | 2.10 | 1.25 | 26,000 | 17,000 | 31,000 | — | — | — | — | — | — | — | 17 | 17.5 | 22 | 0.3 | — | — | — | 0.007 |
| | 28 | 7 | 0.3 | 4.30 | 2.30 | 24,000 | 16,000 | 28,000 | 1.3 | 0.95 | 26.7 | 0.25 | 0.3 | 30.8 | 0.85 | 17 | 17.5 | 26 | 0.3 | 31.5 | 1.9 | 0.9 | 0.016 |
| | 32 | 8 | 0.3 | 5.60 | 2.84 | 24,000 | — | 26,000 | — | — | — | — | — | — | — | 17 | — | 30 | 0.3 | — | — | — | 0.025 |
| | 32 | 9 | 0.3 | 5.60 | 2.84 | 22,000 | 15,000 | 26,000 | 2.06 | 1.35 | 30.15 | 0.4 | 0.3 | 36.7 | 1.12 | 17 | 19 | 30 | 0.3 | 37.5 | 2.9 | 1.2 | 0.030 |
| | 35 | 11 | 0.6 | 7.60 | 3.70 | 19,000 | 15,000 | 23,000 | 2.06 | 1.35 | 33.17 | 0.4 | 0.5 | 39.7 | 1.12 | 19 | 20 | 31 | 0.6 | 40.5 | 2.9 | 1.2 | 0.045 |
| | 42 | 13 | 1 | 11.40 | 5.43 | 17,000 | 12,000 | 21,000 | 2.06 | 1.35 | 39.75 | 0.4 | 0.5 | 46.3 | 1.12 | 20 | 23 | 37 | 1 | 47 | 2.9 | 1.2 | 0.082 |
| 17 | 23 | 4 | 0.2 | 1.00 | 0.66 | 5,000 | — | 6,700 | — | — | — | — | — | — | — | 18.6 | 18.8 | 21.4 | 0.2 | — | — | — | 0.003 |
| | 26 | 5 | 0.3 | 2.20 | 1.50 | 24,000 | 15,000 | 28,000 | — | — | — | — | — | — | — | 19 | 19.5 | 24 | 0.3 | — | — | — | 0.008 |
| | 30 | 7 | 0.3 | 4.60 | 2.60 | 22,000 | 14,000 | 26,000 | 1.3 | 0.95 | 28.7 | 0.25 | 0.3 | 32.8 | 0.85 | 19 | 20 | 28 | 0.3 | 33.5 | 1.9 | 0.9 | 0.018 |
| | 35 | 8 | 0.3 | 6.00 | 3.25 | 20,000 | — | 24,000 | — | — | — | — | — | — | — | 19 | — | 33 | 0.3 | — | — | 0.9 | 0.032 |
| | 35 | 10 | 0.3 | 6.00 | 3.25 | 20,000 | 14,000 | 24,000 | 2.06 | 1.35 | 33.17 | 0.4 | 0.3 | 39.7 | 1.12 | 19 | 21 | 33 | 0.3 | 40.5 | 2.9 | 1.2 | 0.039 |
| | 40 | 12 | 0.6 | 9.57 | 4.80 | 18,000 | 12,000 | 21,000 | 2.06 | 1.35 | 38.1 | 0.4 | 0.5 | 44.6 | 1.12 | 21 | 23 | 36 | 0.6 | 45.5 | 2.9 | 1.2 | 0.066 |
| | 47 | 14 | 1 | 13.60 | 6.60 | 16,000 | 11,000 | 19,000 | 2.46 | 1.35 | 44.6 | 0.4 | 0.5 | 52.7 | 1.12 | 22 | 25 | 42 | 1 | 53.5 | 3.3 | 1.2 | 0.115 |



Open type



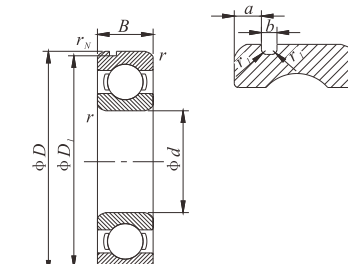
Shielded type
Z



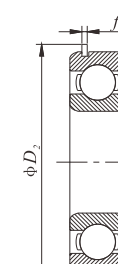
Non-contact seal type
RZ



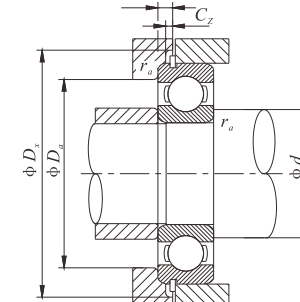
Contact seal type
RS



With snap ring groove

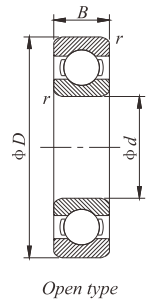


With snap ring

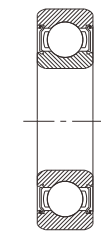


d 20~30 mm

| Boundary dimensions (mm) | Basic load ratings (kN) | | Limiting speeds(r/min) | | | Nominal numbers | Nominal numbers (old) | Dimension of snap ring groove (mm) | | | | | Dimension of snap ring(mm) | | Mounting dimensions (mm) | | | | | | Reference mass (kg) | | | | | |
|-----------------------------|----------------------------|-----|------------------------|----------------|----------------------|-----------------|--------------------------|---------------------------------------|--------------|--------------|------|----------------|-------------------------------|----------------|-----------------------------|------|----------------|----------------|----------------|----------------|---------------------------|----------------|----------------|-------|-------|-------|
| | | | Grease | Oil | Non- contact type | | | Contact type | Open | a | b | D ₁ | r ₁ | r _N | D ₂ | f | d _a | D _a | r _a | D _x | | C _y | C _z | | | |
| d | D | B | r (Min) | C _r | C _{or} | | | Max | Min | Max | Max | Min | Max | Max | Min | Max | Max | Min | Max | Max | | | | | | |
| 20 | 27 | 4 | 0.2 | 1.04 | 0.73 | 5,000 | — | 5,700 | 6704 | — | — | — | — | — | — | — | — | — | — | — | — | 0.005 | | | | |
| | 32 | 7 | 0.3 | 3.50 | 2.20 | 21,000 | 13,000 | 25,000 | 61804 | 1000804 | 1.3 | 0.95 | 30.7 | 0.25 | 0.3 | 34.8 | 0.85 | 22 | 22.5 | 30 | 0.3 | 35.5 | 1.9 | 0.9 | 0.019 | |
| | 37 | 9 | 0.3 | 6.40 | 3.70 | 19,000 | 12,000 | 23,000 | 61904 | 1000904 | 1.7 | 0.95 | 35.7 | 0.25 | 0.3 | 39.8 | 0.85 | 22 | 24 | 35 | 0.3 | 40.5 | 2.3 | 0.9 | 0.036 | |
| | 42 | 8 | 0.3 | 6.30 | 3.80 | 18,000 | — | 21,000 | 16004 | 7000104 | — | — | — | — | — | — | — | 22 | — | 40 | 0.3 | — | — | — | 0.051 | |
| | 42 | 12 | 0.6 | 9.38 | 5.03 | 18,000 | 11,000 | 21,000 | 6004 | 104 | 2.06 | 1.35 | 39.75 | 0.4 | 0.5 | 46.3 | 1.12 | 24 | 26 | 38 | 0.6 | 47 | 2.9 | 1.2 | 0.069 | |
| | 47 | 14 | 1 | 12.80 | 6.60 | 16,000 | 10,000 | 18,000 | 6204 | 204 | 2.46 | 1.35 | 44.6 | 0.4 | 0.5 | 52.7 | 1.12 | 25 | 26 | 42 | 1 | 53.5 | 3.3 | 1.2 | 0.106 | |
| | 52 | 15 | 1.1 | 15.90 | 7.80 | 14,000 | 10,000 | 17,000 | 6304 | 304 | 2.46 | 1.35 | 49.73 | 0.4 | 0.5 | 57.9 | 1.12 | 26.5 | 28.5 | 45.5 | 1 | 58.5 | 3.3 | 1.2 | 0.144 | |
| | 72 | 19 | 1.1 | 28.50 | 13.90 | 12,000 | — | 14,000 | 6404 | 404 | — | — | — | — | — | — | — | 26.5 | — | 65.5 | 1 | — | — | — | 0.400 | |
| | 22 | 44 | 12 | 0.6 | 9.40 | 5.05 | 17,000 | 10,000 | 20,000 | 60/22 | 1/22 | 2.06 | 1.35 | 41.75 | 0.4 | 0.5 | 48.3 | 1.12 | 26 | 26.5 | 40 | 0.6 | 49 | 2.9 | 1.2 | 0.074 |
| | | 50 | 14 | 1 | 12.90 | 6.80 | 14,000 | 9,700 | 17,000 | 62/22 | 2/22 | 2.46 | 1.35 | 47.6 | 0.4 | 0.5 | 55.7 | 1.12 | 27 | 29.5 | 45 | 1 | 56.5 | 3.3 | 1.2 | 0.117 |
| 56 | | 16 | 1.1 | 18.40 | 9.25 | 13,000 | 9,200 | 15,000 | 63/22 | 3/22 | 2.46 | 1.35 | 53.6 | 0.4 | 0.5 | 61.7 | 1.12 | 28.5 | 31 | 49.5 | 1 | 62.5 | 3.3 | 1.2 | 0.176 | |
| 25 | 32 | 4 | 0.2 | 1.89 | 1.50 | 4,000 | — | 4,600 | 6705 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.005 | |
| | 37 | 7 | 0.3 | 4.30 | 2.95 | 18,000 | 10,000 | 21,000 | 61805 | 1000805 | 1.3 | 0.95 | 35.7 | 0.25 | 0.3 | 39.8 | 0.85 | 27 | 28 | 35 | 0.3 | 40.5 | 1.9 | 0.9 | 0.022 | |
| | 42 | 9 | 0.3 | 7.02 | 4.53 | 16,000 | 9,800 | 19,000 | 61905 | 1000905 | 1.7 | 0.95 | 40.7 | 0.25 | 0.3 | 44.8 | 0.85 | 27 | 29 | 40 | 0.3 | 45.5 | 2.3 | 0.9 | 0.042 | |
| | 47 | 8 | 0.3 | 7.00 | 4.60 | 15,000 | — | 18,000 | 16005 | 7000105 | — | — | — | — | — | — | — | 27 | — | 45 | 0.3 | — | — | — | 0.060 | |
| | 47 | 12 | 0.6 | 10.07 | 5.82 | 15,000 | 9,400 | 18,000 | 6005 | 105 | 2.06 | 1.35 | 44.6 | 0.4 | 0.5 | 52.7 | 1.12 | 29 | 30 | 43 | 0.6 | 53.5 | 2.9 | 1.2 | 0.080 | |
| | 52 | 15 | 1 | 14.00 | 7.88 | 13,900 | 8,900 | 15,000 | 6205 | 205 | 2.46 | 1.35 | 49.73 | 0.4 | 0.5 | 57.9 | 1.12 | 30 | 32 | 47 | 1 | 58.5 | 3.3 | 1.2 | 0.128 | |
| | 62 | 17 | 1.1 | 20.60 | 11.20 | 12,000 | 8,100 | 14,000 | 6305 | 305 | 3.28 | 1.9 | 59.61 | 0.6 | 0.5 | 67.7 | 1.7 | 31.5 | 35 | 55.5 | 1 | 68.5 | 4.6 | 1.7 | 0.232 | |
| 80 | 21 | 1.5 | 34.50 | 17.50 | 11,000 | — | 12,000 | 6405 | 405 | — | — | — | — | — | — | — | 33 | — | 72 | 1.5 | — | — | — | 0.530 | | |
| 28 | 52 | 12 | 0.6 | 12.50 | 7.40 | 14,000 | 8,400 | 16,000 | 60/28 | 1/28 | 2.06 | 1.35 | 49.73 | 0.4 | 0.5 | 57.9 | 1.12 | 32 | 34 | 48 | 0.6 | 58.5 | 2.9 | 1.2 | 0.098 | |
| | 58 | 16 | 1 | 17.90 | 9.75 | 12,000 | 8,100 | 14,000 | 62/28 | 2/28 | 2.46 | 1.35 | 55.6 | 0.4 | 0.5 | 63.7 | 1.12 | 33 | 35.5 | 53 | 1 | 64.5 | 3.3 | 1.2 | 0.171 | |
| | 68 | 18 | 1.1 | 26.70 | 14.00 | 11,000 | 7,400 | 13,000 | 63/28 | 3/28 | 3.28 | 1.9 | 64.82 | 0.6 | 0.5 | 74.6 | 1.7 | 34.5 | 38.5 | 61.5 | 1 | 76 | 4.6 | 1.7 | 0.284 | |
| 30 | 37 | 4 | 0.2 | 1.14 | 0.95 | 3,300 | — | 3,800 | 6706 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.006 | |
| | 42 | 7 | 0.3 | 4.96 | 3.62 | 15,000 | 8,800 | 18,000 | 61806 | 1000806 | 1.3 | 0.95 | 40.7 | 0.25 | 0.3 | 44.8 | 0.85 | 32 | 33 | 40 | 0.3 | 45.5 | 1.9 | 0.9 | 0.026 | |
| | 47 | 9 | 0.3 | 7.24 | 5.00 | 14,000 | 8,400 | 17,000 | 61906 | 1000906 | 1.7 | 0.95 | 45.7 | 0.25 | 0.3 | 49.8 | 0.85 | 32 | 34 | 45 | 0.3 | 50.5 | 2.3 | 0.9 | 0.048 | |
| | 55 | 9 | 0.3 | 9.20 | 6.30 | 13,000 | — | 15,000 | 16006 | 7000106 | — | — | — | — | — | — | — | 32 | — | 53 | 0.3 | — | — | — | 0.091 | |
| | 55 | 13 | 1 | 13.20 | 8.27 | 13,000 | 7,700 | 15,000 | 6006 | 106 | 2.08 | 1.35 | 52.6 | 0.4 | 0.5 | 60.7 | 1.12 | 35 | 37 | 50 | 1 | 61.5 | 2.9 | 1.2 | 0.116 | |
| | 62 | 16 | 1 | 19.50 | 11.30 | 11,000 | 7,300 | 13,000 | 6206 | 206 | 3.28 | 1.9 | 59.61 | 0.6 | 0.5 | 67.7 | 1.7 | 35 | 39 | 57 | 1 | 68.5 | 4.6 | 1.7 | 0.199 | |



Open type



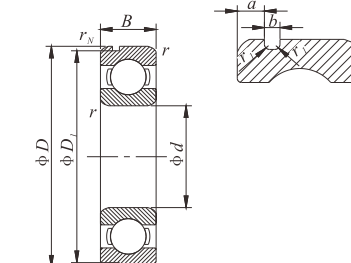
Shielded type
Z



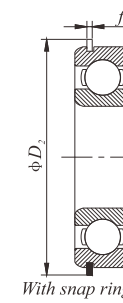
Non-contact seal type
RZ



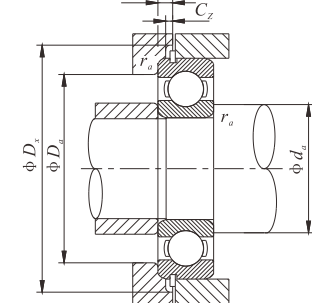
Contact seal type
RS



With snap ring groove

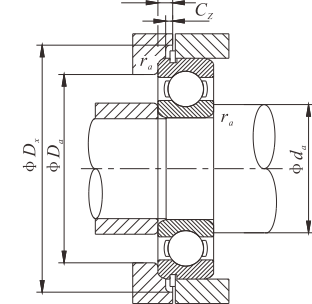
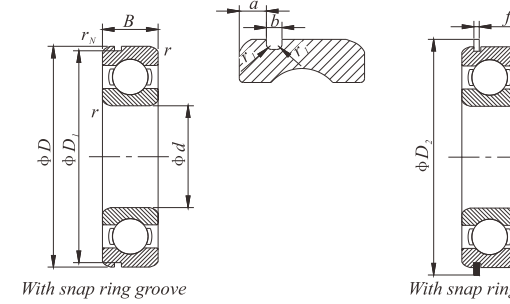
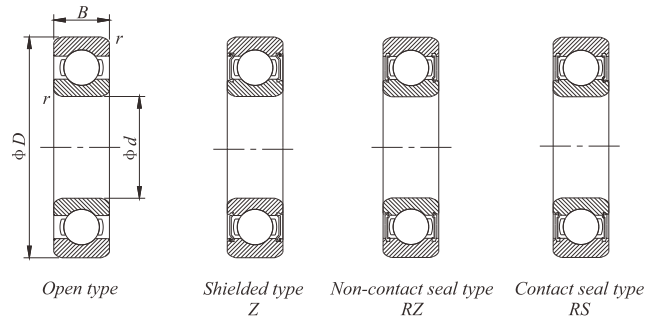


With snap ring



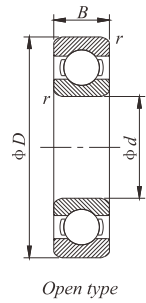
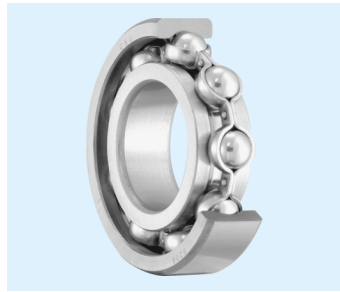
d 30~50 mm

| Boundary dimensions (mm) | Basic load ratings (kN) | | | Limiting speeds(r/min) | | | Nominal numbers | Nominal numbers (old) | Dimension of snap ring groove (mm) | | | | | Dimension of snap ring(mm) | | Mounting dimensions (mm) | | | | | | Reference mass (kg) | | | | | |
|-----------------------------|----------------------------|-----|------------|------------------------|-----------------|----------------------|-----------------|--------------------------|---------------------------------------|----------------|----------------|----------------|----------------|-------------------------------|-------|-----------------------------|----------------|----------------|----------------|----------------|----------------|---------------------------|-----|-------|-------------------------|-----|-----|
| | | | | | | | | | a | b | D ₁ | r ₁ | r _N | D ₂ | f | d _a | D _a | r _a | D _x | C _y | C _z | | | | | | |
| d | D | B | r (Min) | C _r | C _{or} | Non- contact type | Contact type | Oil Open | | | Max | Min | Max | Max | Min | Max | Max | Min | Max | Max | Max | Max | | | | | |
| 30 | 72 | 19 | 1.1 | 26.70 | 15.00 | 10,000 | 6,600 | 12,000 | 6306 | 306 | 3.28 | 1.9 | 68.81 | 0.6 | 0.5 | 78.6 | 1.7 | 36.5 | 43 | 65.5 | 1 | 80 | 4.6 | 1.7 | 0.360 0.735 | | |
| | 90 | 23 | 1.5 | 43.50 | 23.90 | 8,800 | — | 10,000 | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | | | |
| 32 | 58 | 13 | 1 | 11.80 | 8.05 | 12,000 | 7,200 | 15,000 | 60/32 | 1/32 | 2.08 | 1.35 | 55.6 | 0.4 | 0.5 | 63.7 | 1.12 | 37 | 39 | 53 | 1 | 64.5 | 2.9 | 1.2 | 0.129 0.226 0.382 | | |
| | 65 | 17 | 1 | 20.70 | 11.60 | 11,000 | 7,100 | 12,000 | | | 62/32 | 2/32 | 3.28 | 1.9 | 62.6 | 0.6 | 0.5 | 70.7 | 1.7 | 37 | 40 | 60 | 1 | 71.5 | | 4.6 | 1.7 |
| | 75 | 20 | 1.1 | 29.80 | 16.90 | 9,500 | 6,500 | 11,000 | | | 63/32 | 3/32 | 3.28 | 1.9 | 71.83 | 0.6 | 0.5 | 81.6 | 1.7 | 38.5 | 43.5 | 68.5 | 1 | 83 | | 4.6 | 1.7 |
| 35 | 47 | 7 | 0.3 | 4.20 | 3.50 | 13,000 | 7,600 | 16,000 | 61807 | 1000807 | 1.3 | 0.95 | 45.7 | 0.25 | 0.3 | 49.8 | 0.85 | 37 | 38 | 45 | 0.3 | 50.5 | 1.9 | 0.9 | 0.029 0.074 0.110 | | |
| | 55 | 10 | 0.6 | 9.60 | 6.80 | 12,000 | 7,100 | 15,000 | | | 61907 | 1000907 | 1.7 | 0.95 | 53.7 | 0.25 | 0.5 | 57.8 | 0.85 | 39 | 40 | 51 | 0.6 | 58.5 | | 2.3 | 0.9 |
| | 62 | 9 | 0.3 | 12.20 | 8.80 | 12,000 | — | 14,000 | | | 16007 | 7000107 | — | — | — | — | — | — | — | 37 | — | 60 | 0.3 | — | | — | — |
| | 62 | 14 | 1 | 15.90 | 10.30 | 12,000 | 6,800 | 14,000 | 6007 | 107 | 2.08 | 1.9 | 59.61 | 0.6 | 0.5 | 67.7 | 1.7 | 40 | 42 | 57 | 1 | 68.5 | 3.4 | 1.7 | 0.155 0.288 0.457 | | |
| | 72 | 17 | 1.1 | 25.70 | 15.30 | 9,800 | 6,300 | 11,000 | | | 6207 | 207 | 3.28 | 1.9 | 68.81 | 0.6 | 0.5 | 78.6 | 1.7 | 41.5 | 45 | 65.5 | 1 | 80 | | 4.6 | 1.7 |
| | 80 | 21 | 1.5 | 33.50 | 19.20 | 8,800 | 6,000 | 10,000 | | | 6307 | 307 | 3.28 | 1.9 | 76.81 | 0.6 | 0.5 | 86.6 | 1.7 | 43 | 47 | 72 | 1.5 | 88 | | 4.6 | 1.7 |
| 100 | 25 | 1.5 | 55.00 | 31.00 | 7,800 | — | 9,100 | 6407 | 407 | — | — | — | — | — | — | — | 43 | — | 92 | 1.5 | — | — | — | 0.952 | | | |
| 40 | 52 | 7 | 0.3 | 5.07 | 4.37 | 12,000 | 6,700 | 14,000 | 61808 | 1000808 | 1.3 | 0.95 | 50.7 | 0.25 | 0.3 | 54.8 | 0.85 | 42 | 43 | 50 | 0.3 | 55.5 | 1.9 | 0.9 | 0.033 0.110 0.125 | | |
| | 62 | 12 | 0.6 | 13.70 | 9.90 | 11,000 | 6,300 | 13,000 | | | 61908 | 1000908 | 1.7 | 0.95 | 60.7 | 0.25 | 0.5 | 64.8 | 0.85 | 44 | 45 | 58 | 0.6 | 65.5 | | 2.3 | 0.9 |
| | 68 | 9 | 0.3 | 12.60 | 9.65 | 10,000 | — | 12,000 | | | 16008 | 7000108 | 1.7 | — | — | — | — | — | — | 42 | — | 66 | 0.3 | — | | — | — |
| | 68 | 15 | 1 | 16.80 | 11.50 | 10,000 | 6,100 | 12,000 | 6008 | 108 | 2.49 | 1.9 | 64.82 | 0.6 | 0.5 | 74.6 | 1.7 | 45 | 47 | 63 | 1 | 76 | 3.8 | 1.7 | 0.190 0.366 0.630 | | |
| | 80 | 18 | 1.1 | 30.80 | 19.80 | 8,700 | 5,600 | 10,000 | | | 6208 | 208 | 3.28 | 1.9 | 76.81 | 0.6 | 0.5 | 86.6 | 1.7 | 46.5 | 51 | 73.5 | 1 | 88 | | 4.6 | 1.7 |
| | 90 | 23 | 1.5 | 40.70 | 24.00 | 7,800 | 5,300 | 9,200 | | | 6308 | 308 | 3.28 | 2.7 | 86.79 | 0.6 | 0.5 | 96.5 | 2.46 | 48 | 54 | 82 | 1.5 | 98 | | 5.4 | 2.5 |
| 110 | 27 | 2 | 52.50 | 30.2 | 7,000 | — | 8,200 | 6408 | 408 | — | — | — | — | — | — | — | 49 | — | 101 | 2 | — | — | — | 1.230 | | | |
| 45 | 58 | 7 | 0.3 | 5.35 | 4.95 | 11,000 | 5,900 | 12,000 | 61809 | 1000809 | 1.3 | 0.95 | 56.7 | 0.25 | 0.3 | 60.8 | 0.85 | 47 | 48 | 56 | 0.3 | 61.5 | 1.9 | 0.9 | 0.038 0.128 0.171 | | |
| | 68 | 12 | 0.6 | 14.10 | 10.90 | 9,800 | 5,600 | 12,000 | | | 61909 | 1000909 | 1.7 | 0.95 | 66.7 | 0.25 | 0.5 | 70.8 | 0.85 | 49 | 51 | 64 | 0.6 | 72 | | 2.3 | 0.9 |
| | 75 | 10 | 0.6 | 15.60 | 12.20 | 9,200 | — | 11,000 | | | 16009 | 7000109 | — | — | — | — | — | — | — | 49 | — | 71 | 0.6 | — | | — | — |
| | 75 | 16 | 1 | 19.90 | 14.00 | 9,200 | 5,400 | 11,000 | 6009 | 109 | 2.49 | 1.9 | 71.83 | 0.6 | 0.5 | 81.6 | 1.7 | 50 | 52.5 | 70 | 1 | 83 | 3.8 | 1.7 | 0.237 0.398 0.814 | | |
| | 85 | 19 | 1.1 | 31.20 | 20.30 | 7,800 | 5,200 | 9,200 | | | 6209 | 209 | 3.28 | 1.9 | 81.81 | 0.6 | 0.5 | 91.6 | 1.7 | 51.5 | 55.5 | 78.5 | 1 | 93 | | 4.6 | 1.7 |
| 100 | 25 | 1.5 | 52.80 | 31.80 | 7,000 | 4,700 | 8,200 | 6309 | | | 309 | 3.28 | 2.7 | 96.8 | 0.6 | 0.5 | 106.5 | 2.46 | 53 | 61.5 | 92 | 1.5 | 108 | 5.4 | | 2.5 | |
| 120 | 29 | 2 | 77.40 | 45.06 | 6,300 | — | 7,400 | 6409 | 409 | — | — | — | — | — | — | — | 54 | — | 111 | 2 | — | — | — | 1.530 | | | |
| 50 | 65 | 7 | 0.3 | 6.58 | 6.08 | 9,600 | 5,300 | 11,000 | 61810 | 1000810 | 1.3 | 0.95 | 63.7 | 0.25 | 0.3 | 67.8 | 0.85 | 52 | 54 | 63 | 0.3 | 68.5 | 1.9 | 0.9 | 0.050 | | |

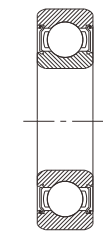


d 50~60 mm

| Boundary dimensions (mm) | Basic load ratings (kN) | | Limiting speeds(r/min) | | | Nominal numbers | Nominal numbers (old) | Dimension of snap ring groove (mm) | | | | | Dimension of snap ring(mm) | | Mounting dimensions (mm) | | | | | | Reference mass (kg) | | | | |
|--------------------------|-------------------------|-----|------------------------|----------------|------------------|------------------|-----------------------|------------------------------------|-------|---------|------|----------------|----------------------------|----------------|--------------------------|-------|----------------|----------------|----------------|----------------|---------------------|----------------|----------------|-------|-------|
| | | | Grease | Oil | Non-contact type | | | Contact type | Open | a | b | D ₁ | r ₁ | r _N | D ₂ | f | d _a | D _a | r _a | D _x | | C _y | C _z | | |
| d | D | B | r (Min) | C _r | C _{or} | Non-contact type | Contact type | Oil Open | | | Max | Min | Max | Max | Min | Max | Max | Min | Max | Max | Max | Max | | | |
| 50 | 72 | 12 | 0.6 | 16.10 | 13.10 | 9,000 | 5,300 | 11,000 | 61910 | 1000910 | 1.7 | 0.95 | 70.7 | 0.25 | 0.5 | 74.8 | 0.85 | 54 | 55.5 | 68 | 0.6 | 76 | 2.3 | 0.9 | 0.135 |
| | 80 | 10 | 0.6 | 16.10 | 13.10 | 8,500 | — | 10,000 | 16010 | 7000110 | — | — | — | — | — | — | — | 54 | — | 76 | 0.6 | — | — | — | 0.175 |
| | 80 | 16 | 1 | 21.80 | 16.60 | 8,500 | 4,800 | 10,000 | 6010 | 110 | 2.49 | 1.9 | 76.81 | 0.6 | 0.5 | 86.6 | 1.7 | 55 | 57.5 | 75 | 1 | 88 | 3.8 | 1.7 | 0.261 |
| | 90 | 20 | 1.1 | 35.00 | 23.20 | 7,100 | 4,700 | 8,300 | 6210 | 210 | 3.28 | 2.7 | 86.79 | 0.6 | 0.5 | 96.5 | 2.46 | 56.5 | 60 | 83.5 | 1 | 98 | 5.4 | 2.5 | 0.454 |
| | 110 | 27 | 2 | 62.00 | 38.50 | 6,400 | 4,200 | 7,500 | 6310 | 310 | 3.28 | 2.7 | 106.81 | 0.6 | 0.5 | 116.6 | 2.46 | 59 | 68.5 | 101 | 2 | 118 | 5.4 | 2.5 | 1.060 |
| | 130 | 31 | 2.1 | 83.00 | 49.50 | 5,700 | — | 6,700 | 6410 | 410 | — | — | — | — | — | — | — | 61 | — | 119 | 2 | — | — | — | 1.880 |
| 55 | 72 | 9 | 0.3 | 9.10 | 8.50 | 8,700 | 4,800 | 10,000 | 61811 | 1000811 | 1.7 | 0.95 | 70.7 | 0.25 | 0.3 | 74.8 | 0.85 | 57 | 59 | 70 | 0.3 | 76 | 2.3 | 0.9 | 0.083 |
| | 80 | 13 | 1 | 15.96 | 13.25 | 8,200 | 4,300 | 9,600 | 61911 | 1000911 | 2.1 | 1.3 | 77.9 | 0.4 | 0.5 | 84.4 | 0.12 | 60 | 61.5 | 75 | 1 | 86 | 2.9 | 1.2 | 0.180 |
| | 90 | 11 | 0.6 | 19.40 | 16.30 | 7,700 | — | 9,000 | 16011 | 7000111 | — | — | — | — | — | — | — | 59 | — | 86 | 0.6 | — | — | — | 0.258 |
| | 90 | 18 | 1.1 | 30.90 | 22.40 | 7,700 | 4,500 | 9,000 | 6011 | 111 | 2.87 | 2.7 | 86.79 | 0.6 | 0.5 | 96.5 | 2.46 | 61.5 | 64 | 83.5 | 1 | 98 | 5 | 2.5 | 0.388 |
| | 100 | 21 | 1.5 | 43.40 | 29.20 | 6,400 | 4,300 | 7,600 | 6211 | 211 | 3.28 | 2.7 | 96.8 | 0.6 | 0.5 | 106.5 | 2.46 | 63 | 67 | 92 | 1.5 | 108 | 5.4 | 2.5 | 0.601 |
| | 120 | 29 | 2 | 71.50 | 44.60 | 5,800 | 3,900 | 6,800 | 6311 | 311 | 4.06 | 3.1 | 115.21 | 0.6 | 0.5 | 129.7 | 2.82 | 64 | 74 | 111 | 2 | 131.5 | 6.5 | 2.9 | 1.370 |
| 140 | 33 | 2.1 | 100.70 | 62.50 | 5,200 | — | 6,100 | 6411 | 411 | — | — | — | — | — | — | — | 66 | — | 129 | 2 | — | — | — | 2.290 | |
| 60 | 78 | 10 | 0.3 | 9.10 | 8.70 | 8,000 | 4,400 | 9,400 | 61812 | 1000812 | 1.7 | 1.3 | 76.2 | 0.4 | 0.3 | 82.7 | 1.12 | 62 | 64.5 | 76 | 0.3 | 84 | 2.5 | 1.2 | 0.106 |
| | 85 | 13 | 1 | 28.70 | 17.20 | 7,600 | 4,300 | 8,900 | 61912 | 1000912 | 2.1 | 1.3 | 82.9 | 0.4 | 0.5 | 89.4 | 1.12 | 65 | 66.5 | 80 | 1 | 91 | 2.9 | 1.2 | 0.193 |
| | 95 | 11 | 0.6 | 19.90 | 17.50 | 7,000 | — | 8,300 | 16012 | 7000112 | — | — | — | — | — | — | — | 64 | — | 91 | 0.6 | — | — | — | 0.283 |
| | 95 | 18 | 1.1 | 30.70 | 22.70 | 7,000 | 4,100 | 8,300 | 6012 | 112 | 2.87 | 2.7 | 91.82 | 0.6 | 0.5 | 101.6 | 2.46 | 66.5 | 69 | 88.5 | 1 | 103 | 5 | 2.5 | 0.414 |
| | 110 | 22 | 1.5 | 52.40 | 35.90 | 6,000 | 3,800 | 7,000 | 6212 | 212 | 3.28 | 2.7 | 106.81 | 0.6 | 0.5 | 116.6 | 2.46 | 68 | 75 | 102 | 1.5 | 118 | 5.4 | 2.5 | 0.783 |
| | 130 | 31 | 2.1 | 81.80 | 51.80 | 5,400 | 3,600 | 6,300 | 6312 | 312 | 4.06 | 3.1 | 125.22 | 0.6 | 0.5 | 139.7 | 2.82 | 71 | 80.5 | 119 | 2 | 141.5 | 6.5 | 2.9 | 1.730 |
| 150 | 35 | 2.1 | 102.00 | 64.50 | 4,800 | — | 5,700 | 6412 | 412 | — | — | — | — | — | — | — | 71 | — | 139 | 2 | — | — | — | 2.770 | |



Open type



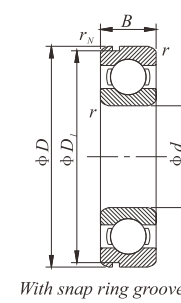
Shielded type
Z



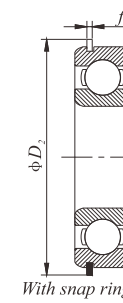
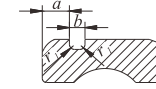
Non-contact seal type
RZ



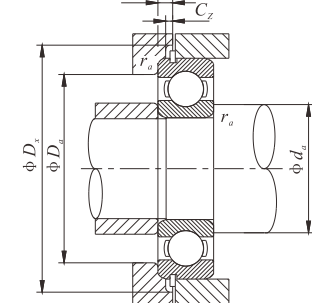
Contact seal type
RS



With snap ring groove

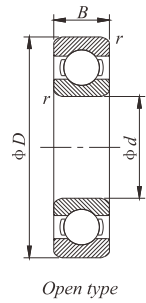


With snap ring

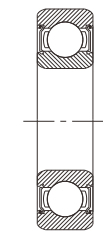


d 65~80 mm

| Boundary dimensions (mm) | Basic load ratings (kN) | | Limiting speeds(r/min) | | | Nominal numbers | Nominal numbers (old) | Dimension of snap ring groove (mm) | | | | | Dimension of snap ring(mm) | | Mounting dimensions (mm) | | | | | | Reference mass (kg) | | | | |
|-----------------------------|----------------------------|-----------------|------------------------|--------------|--------|-----------------|--------------------------|---------------------------------------|--------------|----------------|------|----------------|-------------------------------|----------------|-----------------------------|-------|----------------|----------------|----------------|----------------|---------------------------|----------------|----------------|-----|-------|
| | | | Grease | Oil | Non- | | | Contact type | Open | a | b | D ₁ | r ₁ | r _N | D ₂ | f | d _a | D _a | r _a | D _x | | C _y | C _z | | |
| d D B r (Min) | C _r | C _{or} | Non- | Contact type | Open | | | Max | Min | Max | Max | Min | Max | Max | Min | Max | Max | Min | Max | Max | | | | | |
| 65 | 85 | 10 | 0.6 | 11.90 | 11.50 | 7400 | 4100 | 8700 | 61813 | 1000813 | 1.7 | 1.3 | 82.9 | 0.4 | 0.5 | 89.4 | 1.12 | 69 | 70 | 81 | 0.6 | 91 | 2.5 | 1.2 | 0.128 |
| | 90 | 13 | 1 | 17.40 | 16.10 | 7000 | 4000 | 8200 | 61913 | 1000913 | 2.1 | 1.3 | 87.9 | 0.4 | 0.5 | 94.4 | 1.12 | 70 | 71.5 | 85 | 1 | 96 | 2.9 | 1.2 | 0.206 |
| | 100 | 11 | 0.6 | 20.50 | 18.70 | 6500 | — | 7700 | 16013 | 7000113 | — | — | — | — | — | — | — | 69 | — | 96 | 0.6 | — | — | — | 0.307 |
| | 100 | 18 | 1.1 | 29.20 | 23.50 | 6500 | 3900 | 7700 | 6013 | 113 | 2.87 | 2.7 | 96.8 | 0.6 | 0.5 | 106.5 | 2.46 | 71.5 | 74 | 93.5 | 1 | 108 | 5 | 2.5 | 0.421 |
| | 120 | 23 | 1.5 | 57.20 | 40.00 | 5500 | 3600 | 6500 | 6213 | 213 | 4.06 | 3.1 | 115.21 | 0.6 | 0.5 | 129.7 | 2.82 | 73 | 80.5 | 112 | 1.5 | 131.5 | 6.5 | 2.9 | 0.990 |
| | 140 | 33 | 2.1 | 92.70 | 59.80 | 4900 | 3300 | 5800 | 6313 | 313 | 4.9 | 3.1 | 135.23 | 0.6 | 0.5 | 149.7 | 2.82 | 76 | 86 | 129 | 2 | 152 | 7.3 | 2.9 | 2.080 |
| | 160 | 37 | 2.1 | 111.00 | 72.50 | 4400 | — | 5200 | 6413 | 413 | — | — | — | — | — | — | — | 76 | — | 149 | 2 | — | — | — | 3.300 |
| 70 | 90 | 10 | 0.6 | 12.20 | 11.90 | 6900 | 3800 | 8100 | 61814 | 1000814 | 1.7 | 1.3 | 87.9 | 0.4 | 0.5 | 94.4 | 1.12 | 74 | 75.5 | 86 | 0.6 | 96 | 2.5 | 1.2 | 0.137 |
| | 100 | 16 | 1 | 23.70 | 21.10 | 6500 | 3700 | 7700 | 61914 | 1000914 | 2.5 | 1.3 | 97.9 | 0.4 | 0.5 | 104.4 | 1.12 | 75 | 77.5 | 95 | 1 | 106 | 3.3 | 1.2 | 0.334 |
| | 110 | 13 | 0.6 | 26.80 | 23.60 | 6100 | — | 7100 | 16014 | 7000114 | — | — | — | — | — | — | — | 74 | — | 106 | 0.6 | — | — | — | 0.441 |
| | 110 | 20 | 1.1 | 38.60 | 30.40 | 6100 | 3600 | 7100 | 6014 | 114 | 2.87 | 2.7 | 106.81 | 0.6 | 0.5 | 116.6 | 2.46 | 76.5 | 80.5 | 103.5 | 1 | 118 | 5 | 2.5 | 0.604 |
| | 125 | 24 | 1.5 | 62.20 | 44.00 | 5100 | 3400 | 6000 | 6214 | 214 | 4.06 | 3.1 | 120.22 | 0.6 | 0.5 | 134.7 | 2.82 | 78 | 85 | 117 | 1.5 | 136.5 | 6.5 | 2.9 | 1.070 |
| | 150 | 35 | 2.1 | 104.10 | 68.00 | 4600 | 3100 | 5400 | 6314 | 314 | 4.9 | 3.1 | 145.24 | 0.6 | 0.5 | 159.7 | 2.82 | 81 | 92.5 | 139 | 2 | 162 | 7.3 | 2.9 | 2.520 |
| | 180 | 42 | 3 | 128.00 | 89.50 | 4100 | — | 4800 | 6414 | 414 | — | — | — | — | — | — | — | 83 | — | 167 | 2.5 | — | — | — | 4.830 |
| 75 | 95 | 10 | 0.6 | 12.50 | 12.80 | 6400 | 3600 | 7600 | 61815 | 1000815 | 1.7 | 1.3 | 92.9 | 0.4 | 0.5 | 99.4 | 1.12 | 79 | 80 | 91 | 0.6 | 101 | 2.5 | 1.2 | 0.145 |
| | 105 | 16 | 1 | 24.30 | 22.50 | 6100 | 3500 | 7200 | 61915 | 1000915 | 2.5 | 1.3 | 102.6 | 0.4 | 0.5 | 110.7 | 1.12 | 80 | 82.5 | 100 | 1 | 112 | 3.3 | 1.2 | 0.353 |
| | 115 | 13 | 0.6 | 27.60 | 25.30 | 5700 | — | 6700 | 16015 | 7000115 | — | — | — | — | — | — | — | 79 | — | 111 | 0.6 | — | — | — | 0.464 |
| | 115 | 20 | 1.1 | 40.10 | 33.10 | 5700 | 3300 | 6700 | 6015 | 115 | 2.87 | 2.7 | 111.81 | 0.6 | 0.5 | 121.6 | 2.46 | 81.5 | 85.5 | 108.5 | 1 | 123 | 5 | 2.5 | 0.649 |
| | 130 | 25 | 1.5 | 66.20 | 49.30 | 4800 | 3200 | 5600 | 6215 | 215 | 4.06 | 3.1 | 125.22 | 0.6 | 0.5 | 139.7 | 2.82 | 83 | 90.5 | 122 | 1.5 | 141.5 | 6.5 | 2.9 | 1.180 |
| | 160 | 37 | 2.1 | 114.00 | 76.50 | 4300 | 2900 | 5000 | 6315 | 315 | 4.9 | 3.1 | 155.22 | 0.6 | 0.5 | 169.7 | 2.82 | 86 | 99 | 149 | 2 | 172 | 7.3 | 2.9 | 3.020 |
| | 190 | 45 | 3 | 153.20 | 113.70 | 3800 | — | 4500 | 6415 | 415 | — | — | — | — | — | — | — | 88 | — | 177 | 2.5 | — | — | — | 5.720 |
| 80 | 100 | 10 | 0.6 | 12.60 | 12.70 | 6000 | 3400 | 7100 | 61816 | 1000816 | 1.7 | 1.3 | 97.9 | 0.4 | 0.5 | 104.4 | 1.12 | 84 | 85 | 96 | 0.6 | 106 | 2.5 | 1.2 | 0.154 |
| | 110 | 16 | 1 | 25.00 | 23.90 | 5700 | 3200 | 6700 | 61916 | 1000916 | 2.5 | 1.3 | 107.6 | 0.4 | 0.5 | 115.7 | 1.12 | 85 | 88 | 105 | 1 | 117 | 3.3 | 1.2 | 0.373 |
| | 125 | 14 | 0.6 | 31.90 | 29.60 | 5300 | — | 6200 | 16016 | 7000116 | — | — | — | — | — | — | — | 84 | — | 121 | 0.6 | — | — | — | 0.597 |
| | 125 | 22 | 1.1 | 47.50 | 39.80 | 5300 | 3100 | 6200 | 6016 | 116 | 2.87 | 3.1 | 120.22 | 0.6 | 0.5 | 134.7 | 2.82 | 86.5 | 91.5 | 118.5 | 1 | 136.5 | 5.3 | 2.9 | 0.854 |
| | 140 | 26 | 2 | 72.70 | 53.00 | 4500 | 3000 | 5300 | 6216 | 216 | 4.9 | 3.1 | 135.23 | 0.6 | 0.5 | 149.7 | 2.82 | 89 | 95.5 | 131 | 2 | 152 | 7.3 | 2.9 | 1.400 |
| | 170 | 39 | 2.1 | 90.40 | 89.60 | 4000 | 2700 | 4700 | 6316 | 316 | 5.69 | 3.5 | 163.65 | 0.6 | 0.5 | 182.9 | 3.1 | 91 | 105 | 159 | 2 | 185 | 8.4 | 3.1 | 3.590 |
| | 200 | 48 | 3 | 163.20 | 124.50 | 3600 | — | 4200 | 6416 | 416 | — | — | — | — | — | — | — | 93 | — | 187 | 2.5 | — | — | — | 6.760 |



Open type



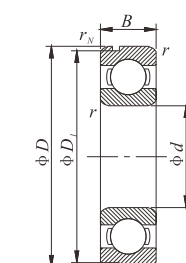
Shielded type
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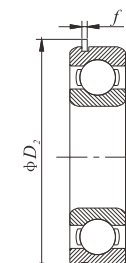
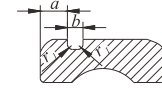
Non-contact seal type
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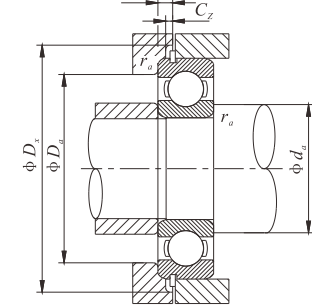
Contact seal type
RS



With snap ring groove

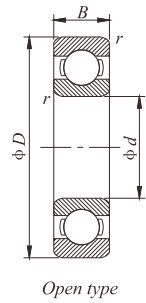


With snap ring



d 85~105 mm

| Boundary dimensions (mm) | Basic load ratings (kN) | | Limiting speeds(r/min) | | | Nominal numbers | Nominal numbers (old) | Dimension of snap ring groove (mm) | | | | | Dimension of snap ring(mm) | | Mounting dimensions (mm) | | | | | | Reference mass (kg) | | | | |
|-----------------------------|----------------------------|----|--------------------------------|------------------------|-------------|-----------------|--------------------------|---------------------------------------|--------------|-----------------------|-----------------------|-----------------------|-------------------------------|----------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------|-----------------------|-----|-----|-------|
| | | | Grease Non- contact type | Grease Contact type | Oil Open | | | a Max | b Min | D ₁ Max | r ₁ Max | r _N Min | D ₂ Max | f Max | d _a Min | d _a Max | D _a Max | r _a Max | D _x Min | C _y Max | | C _z Max | | | |
| 85 | 110 | 13 | 1 | 19.80 | 19.20 | 5700 | 3100 | 6700 | 61817 | 1000817 | 2.1 | 1.3 | 107.6 | 0.4 | 0.5 | 115.7 | 1.12 | 90 | 91 | 105 | 1 | 117 | 2.9 | 1.2 | 0.270 |
| | 120 | 18 | 1.1 | 31.90 | 29.70 | 5400 | 3000 | 6300 | 61917 | 1000917 | 3.3 | 1.3 | 117.6 | 0.4 | 0.5 | 125.7 | 1.12 | 91.5 | 94 | 113.5 | 1 | 127 | 4.1 | 1.2 | 0.536 |
| | 130 | 14 | 0.6 | 32.80 | 31.50 | 5000 | — | 5900 | 16017 | 7000117 | — | — | — | — | — | — | — | 89 | — | 126 | 0.6 | — | — | — | 0.626 |
| | 130 | 22 | 1.1 | 52.80 | 44.50 | 5000 | 2900 | 5900 | 6017 | 117 | 2.87 | 3.1 | 125.22 | 0.6 | 0.5 | 139.7 | 2.82 | 91.5 | 97 | 123.5 | 1 | 141.5 | 5.3 | 2.9 | 0.890 |
| | 150 | 28 | 2 | 83.30 | 63.80 | 4200 | 2800 | 5000 | 6217 | 217 | 4.9 | 3.1 | 145.24 | 0.6 | 0.5 | 159.7 | 2.82 | 94 | 103 | 141 | 2 | 162 | 7.3 | 2.9 | 1.790 |
| | 180 | 41 | 3 | 132.70 | 96.60 | 3800 | 2600 | 4500 | 6317 | 317 | 5.69 | 3.5 | 173.66 | 0.6 | 0.5 | 192.9 | 3.1 | 98 | 112 | 167 | 2.5 | 195 | 8.4 | 3.1 | 4.230 |
| 90 | 115 | 13 | 1 | 19.00 | 19.70 | 5400 | 3000 | 6300 | 61818 | 1000818 | 2.1 | 1.3 | 112.6 | 0.4 | 0.5 | 120.7 | 1.12 | 95 | 96 | 110 | 1 | 122 | 2.9 | 1.2 | 0.285 |
| | 125 | 18 | 1.1 | 32.80 | 31.50 | 5100 | 2900 | 6000 | 61918 | 1000918 | 3.3 | 1.3 | 122.6 | 0.4 | 0.5 | 130.7 | 1.12 | 96.5 | 99 | 118.5 | 1 | 132 | 4.1 | 1.2 | 0.554 |
| | 140 | 16 | 1 | 41.50 | 39.30 | 4700 | — | 5600 | 16018 | 7000118 | — | — | — | — | — | — | — | 95 | — | 135 | 1 | — | — | — | 0.848 |
| | 140 | 24 | 1.5 | 61.20 | 50.60 | 4700 | 2800 | 5600 | 6018 | 118 | 3.71 | 3.1 | 135.23 | 0.6 | 0.5 | 149.7 | 2.82 | 98 | 102 | 132 | 1.5 | 152 | 6.1 | 2.9 | 1.020 |
| | 160 | 30 | 2 | 96.00 | 71.50 | 4000 | 2600 | 4700 | 6218 | 218 | 4.9 | 3.1 | 155.22 | 0.6 | 0.5 | 169.7 | 2.82 | 99 | 109 | 151 | 2 | 172 | 7.3 | 2.9 | 2.150 |
| | 190 | 43 | 3 | 142.60 | 107.20 | 3600 | 2400 | 4200 | 6318 | 318 | 5.69 | 3.5 | 183.64 | 0.6 | 0.5 | 202.9 | 3.1 | 103 | 118 | 177 | 2.5 | 205 | 8.4 | 3.1 | 4.910 |
| 95 | 120 | 13 | 1 | 20.80 | 19.80 | 5000 | 2800 | 5900 | 61819 | 1000819 | 2.1 | 1.3 | 117.6 | 0.4 | 0.5 | 125.7 | 1.12 | 100 | 101 | 115 | 1 | 127 | 2.9 | 1.2 | 0.300 |
| | 130 | 18 | 1.1 | 33.70 | 33.40 | 4800 | 2800 | 5700 | 61919 | 1000919 | 3.3 | 1.3 | 127.6 | 0.4 | 0.5 | 135.7 | 1.12 | 101.5 | 104 | 123.5 | 1 | 137 | 4.1 | 1.2 | 0.579 |
| | 145 | 16 | 1 | 42.70 | 41.90 | 4500 | — | 5300 | 16019 | 7000119 | — | — | — | — | — | — | — | 100 | — | 140 | 1 | — | — | — | 0.885 |
| | 145 | 24 | 1.5 | 60.80 | 51.00 | 4500 | 2600 | 5300 | 6019 | 119 | 3.71 | 3.1 | 140.23 | 0.6 | 0.5 | 154.7 | 2.82 | 103 | 109 | 137 | 1.5 | 157 | 6.1 | 2.9 | 1.080 |
| | 170 | 32 | 2.1 | 109.00 | 82.00 | 3700 | 2500 | 4400 | 6219 | 219 | 5.69 | 3.5 | 163.65 | 0.6 | 0.5 | 182.9 | 3.1 | 106 | 116 | 159 | 2 | 185 | 8.4 | 3.1 | 2.620 |
| | 200 | 45 | 3 | 156.60 | 121.80 | 3300 | 2300 | 3900 | 6319 | 319 | 5.69 | 3.5 | 193.65 | 0.6 | 0.5 | 212.9 | 3.1 | 108 | 125 | 187 | 2.5 | 215 | 8.4 | 3.1 | 5.670 |
| 100 | 125 | 13 | 1 | 20.10 | 22.00 | 4800 | 2700 | 5600 | 61820 | 1000820 | 2.1 | 1.3 | 122.6 | 0.4 | 0.5 | 130.7 | 1.12 | 105 | 106 | 120 | 1 | 132 | 2.9 | 1.2 | 0.313 |
| | 140 | 20 | 1.1 | 42.70 | 41.90 | 4500 | 2600 | 5300 | 61920 | 1000920 | 3.3 | 1.9 | 137.6 | 0.6 | 0.5 | 145.7 | 1.7 | 106.5 | 110 | 133.5 | 1 | 147 | 4.7 | 1.7 | 0.785 |
| | 150 | 16 | 1 | 43.80 | 44.30 | 4200 | — | 5000 | 16020 | 7000120 | — | — | — | — | — | — | — | 105 | — | 145 | 1 | — | — | — | 0.910 |
| | 150 | 24 | 1.5 | 60.20 | 54.20 | 4200 | 2600 | 5000 | 6020 | 120 | 3.71 | 3.1 | 145.24 | 0.6 | 0.5 | 159.7 | 2.82 | 108 | 110 | 142 | 1.5 | 162 | 6.1 | 2.9 | 1.150 |
| | 180 | 34 | 2.1 | 122.00 | 92.70 | 3500 | 2300 | 4200 | 6220 | 220 | 5.69 | 3.5 | 173.66 | 0.6 | 0.5 | 192.9 | 3.1 | 111 | 122 | 169 | 2 | 195 | 8.4 | 3.1 | 3.140 |
| | 215 | 47 | 3 | 173.00 | 140.20 | 3200 | 2200 | 3700 | 6320 | 320 | — | — | — | — | — | — | — | 113 | 133 | 202 | 2.5 | — | — | — | 7.000 |
| 105 | 130 | 13 | 1 | 19.80 | 22.00 | 4600 | — | 5400 | 61821 | 1000821 | 2.1 | 1.3 | 127.6 | 0.4 | 0.5 | 135.7 | 1.12 | 110 | — | 125 | 1 | 137 | 2.9 | 1.2 | 0.330 |
| | 145 | 20 | 1.1 | 42.50 | 42.00 | 4300 | 2500 | 5100 | 61921 | 1000921 | 3.3 | 1.9 | 142.6 | 0.6 | 0.5 | 150.7 | 1.7 | 111.5 | 115 | 138.5 | 1 | 152 | 4.7 | 1.7 | 0.816 |
| | 160 | 18 | 1 | 51.80 | 50.60 | 4000 | — | 4700 | 16021 | 7000121 | — | — | — | — | — | — | — | 110 | — | 155 | 1 | — | — | — | 1.200 |
| | 160 | 26 | 2 | 69.20 | 61.20 | 4000 | 2400 | 4700 | 6021 | 121 | 3.71 | 3.1 | 155.22 | 0.6 | 0.5 | 169.7 | 2.82 | 114 | 119 | 151 | 2 | 172 | 6.1 | 2.9 | 1.590 |
| | 190 | 36 | 2.1 | 133.00 | 105.00 | 3400 | 2300 | 4000 | 6221 | 221 | 5.69 | 3.5 | 183.64 | 0.6 | 0.5 | 202.9 | 3.1 | 116 | 125 | 179 | 2 | 205 | 8.4 | 3.1 | 3.700 |
| | 225 | 49 | 3 | 183.70 | 153.10 | 3000 | 2100 | 3600 | 6321 | 321 | — | — | — | — | — | — | — | 118 | 134 | 212 | 2.5 | — | — | — | 8.050 |



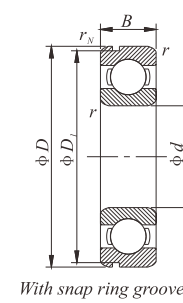
Open type



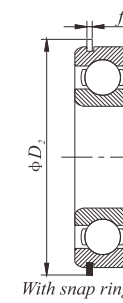
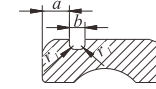
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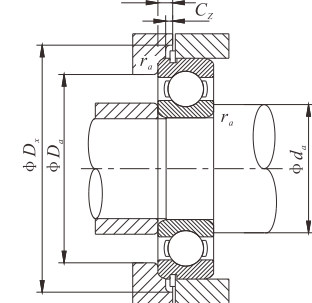
Contact seal type
2RS



With snap ring groove

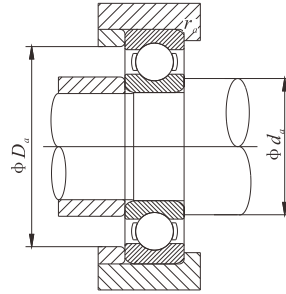
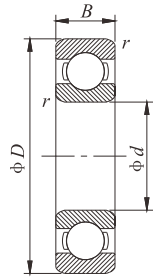


With snap ring



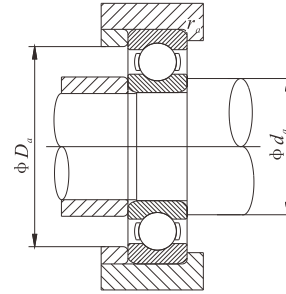
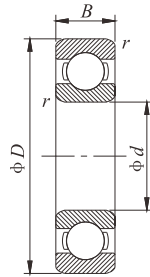
d 130~170 mm

| Boundary dimensions (mm) | Basic load ratings (kN) | | Limiting speeds (r/min) | | Nominal numbers | Nominal numbers (old) | Dimension of snap ring groove (mm) | | | | | Dimension of snap ring (mm) | | Mounting dimensions (mm) | | | | | | Reference mass (kg) | | | | |
|-----------------------------|----------------------------|----|----------------------------|-------------|-----------------|--------------------------|---------------------------------------|--------------|-----------------------|-----------------------|-----------------------|-----------------------------|----------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----|-----|-----|-------|
| | | | Grease ZZ | Oil Open | | | a Max | b Min | D ₁ Max | r ₁ Max | r _N Min | D ₂ Max | f Max | d _a Min | D _a Max | r _a Max | D _x Min | C _y Max | C _z Max | | | | | |
| 130 | 165 | 18 | 1.1 | 37.9 | 42.9 | 3600 | 4300 | 61826 | 1000826 | 3.3 | 1.9 | 161.8 | 0.6 | 0.5 | 171.5 | 1.7 | 136.5 | — | 158.5 | 1 | 173 | 4.7 | 1.7 | 0.800 |
| | 180 | 24 | 1.5 | 65.1 | 67.2 | 3400 | 4000 | 61926 | 1000926 | 3.7 | 1.9 | 176.8 | 0.6 | 0.5 | 186.5 | 1.7 | 138 | — | 172 | 1.5 | 188 | 5.1 | 1.7 | 1.520 |
| | 200 | 22 | 1.1 | 80.0 | 79.5 | 3200 | 3800 | 16026 | 7000126 | — | — | — | — | — | — | — | 136.5 | — | 193.5 | 1 | — | — | — | 2.310 |
| | 200 | 33 | 2 | 105.0 | 96.8 | 3200 | 3800 | 6026 | 126 | 5.69 | 3.5 | 193.65 | 0.6 | 0.5 | 212.9 | 3.1 | 139 | 148 | 191 | 2 | 215 | 8.4 | 3.1 | 3.160 |
| | 230 | 40 | 3 | 165.0 | 148.0 | 2600 | 3200 | 6226 | 226 | — | — | — | — | — | — | — | 143 | — | 217 | 2.5 | — | — | — | 5.820 |
| | 280 | 58 | 4 | 250.9 | 238.7 | 2200 | 2800 | 6326 | 326 | — | — | — | — | — | — | — | 146 | — | 264 | 3 | — | — | — | 15.30 |
| | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 140 | 175 | 18 | 1.1 | 38.2 | 44.3 | 3400 | 4000 | 61828 | 1000828 | 3.3 | 1.9 | 171.8 | 0.6 | 0.5 | 181.5 | 1.7 | 146.5 | — | 168.5 | 1 | 183 | 4.7 | 1.7 | 0.850 |
| | 190 | 24 | 1.5 | 66.5 | 71.5 | 3200 | 3800 | 61928 | 1000928 | 3.7 | 1.9 | 186.8 | 0.6 | 0.5 | 196.5 | 1.7 | 148 | — | 182 | 1.5 | 198 | 5.1 | 1.7 | 1.620 |
| | 210 | 22 | 1.1 | 82.1 | 85.0 | 3000 | 3600 | 16028 | 7000128 | — | — | — | — | — | — | — | 146.5 | — | 203.5 | 1 | — | — | — | 2.450 |
| | 210 | 33 | 2 | 105.4 | 101.8 | 3000 | 3600 | 6028 | 128 | — | — | — | — | — | — | — | 149 | 158 | 201 | 2 | — | — | — | 3.350 |
| | 250 | 42 | 3 | 166.0 | 150.0 | 2400 | 3000 | 6228 | 228 | — | — | — | — | — | — | — | 153 | — | 237 | 2.5 | — | — | — | 7.570 |
| | 300 | 62 | 4 | 211.4 | 254.0 | 2000 | 2600 | 6328 | 328 | — | — | — | — | — | — | — | 156 | — | 284 | 3 | — | — | — | 18.50 |
| 150 | 190 | 20 | 1.1 | 47.5 | 55.0 | 3000 | 3600 | 61830 | 1000830 | 3.3 | 1.9 | 186.8 | 0.6 | 0.5 | 196.5 | 1.7 | 156.5 | — | 183.5 | 1 | 198 | 4.7 | 1.7 | 1.160 |
| | 210 | 28 | 2 | 84.7 | 90.2 | 2800 | 3400 | 61930 | 100930 | — | — | — | — | — | — | — | 159 | — | 201 | 2 | — | — | — | 2.470 |
| | 225 | 24 | 1.1 | 91.8 | 98.5 | 2600 | 3200 | 16030 | 7000130 | — | — | — | — | — | — | — | 156.5 | — | 218.5 | 1 | — | — | — | 3.070 |
| | 225 | 35 | 2.1 | 131.7 | 124.5 | 2600 | 3200 | 6030 | 130 | — | — | — | — | — | — | — | 161 | 169 | 214 | 2 | — | — | — | 4.080 |
| | 270 | 45 | 3 | 176.0 | 168.0 | 2000 | 2600 | 6230 | 230 | — | — | — | — | — | — | — | 163 | — | 257 | 2.5 | — | — | — | 9.410 |
| | 320 | 65 | 4 | 221.6 | 270.0 | 1900 | 2400 | 6330 | 330 | — | — | — | — | — | — | — | 166 | — | 304 | 3 | — | — | — | 22.00 |
| 160 | 200 | 20 | 1.1 | 49.6 | 59.1 | 2800 | 3400 | 61832 | 1000832 | 3.3 | 1.9 | 196.8 | 0.6 | 0.5 | 206.5 | 1.7 | 166.5 | — | 193.5 | 1 | 208 | 4.7 | 1.7 | 1.230 |
| | 220 | 28 | 2 | 86.9 | 95.5 | 2600 | 3200 | 61932 | 1000932 | — | — | — | — | — | — | — | 169 | — | 211 | 2 | — | — | — | 2.610 |
| | 240 | 25 | 1.5 | 99.0 | 108.0 | 2400 | 3000 | 16032 | 7000132 | — | — | — | — | — | — | — | 168 | — | 232 | 1.5 | — | — | — | 3.640 |
| | 240 | 38 | 2.1 | 136.6 | 135.4 | 2400 | 3000 | 6032 | 132 | — | — | — | — | — | — | — | 171 | 183 | 229 | 2 | — | — | — | 5.050 |
| | 290 | 48 | 3 | 215.0 | 218.0 | 1900 | 2400 | 6232 | 232 | — | — | — | — | — | — | — | 173 | — | 277 | 2.5 | — | — | — | 11.70 |
| | 340 | 68 | 4 | 301.0 | 317.0 | 1800 | 2200 | 6332 | 332 | — | — | — | — | — | — | — | 176 | — | 324 | 3 | — | — | — | 26.00 |
| 170 | 215 | 22 | 1.1 | 59.8 | 70.4 | 2600 | 3200 | 61834 | 1000834 | — | — | — | — | — | — | — | 176.5 | — | 208.5 | 1 | — | — | — | 1.630 |
| | 230 | 28 | 2 | 86.0 | 95.5 | 2400 | 3000 | 61934 | 1000934 | — | — | — | — | — | — | — | 179 | — | 221 | 2 | — | — | — | 2.740 |
| | 260 | 28 | 1.5 | 119.0 | 128.0 | 2200 | 2800 | 16034 | 7000134 | — | — | — | — | — | — | — | 178 | — | 252 | 1.5 | — | — | — | 4.930 |
| | 260 | 42 | 2.1 | 168.0 | 172.0 | 2200 | 2800 | 6034 | 134 | — | — | — | — | — | — | — | 181 | — | 249 | 2 | — | — | — | 6.760 |
| | 310 | 52 | 4 | 212.0 | 223.0 | 1900 | 2400 | 6234 | 234 | — | — | — | — | — | — | — | 186 | — | 294 | 3 | — | — | — | 14.50 |
| | 360 | 72 | 4 | 335.5 | 378.1 | 1700 | 2000 | 6334 | 334 | — | — | — | — | — | — | — | 186 | — | 344 | 3 | — | — | — | 30.70 |



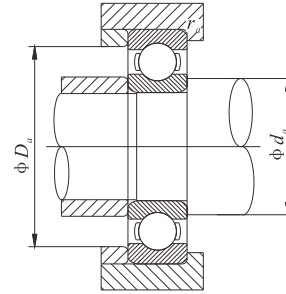
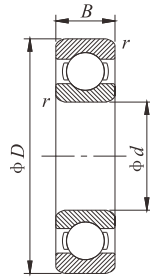
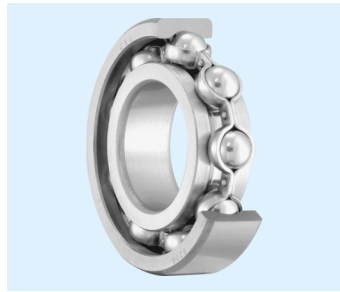
d 180~200 mm

| Boundary dimensions (mm) | | | | Basic load ratings (kN) | | Limiting speeds (r/min) | | Nominal numbers | Nominal numbers (old) | Mounting dimensions (mm) | | | Reference mass (kg) | | | |
|--------------------------|------------|-----|---------|-------------------------|-----------------|-------------------------|------|-----------------|-----------------------|--------------------------|--------------------|--------------------|---------------------|-------|-------|-------|
| d | D | B | r (Min) | C _r | C _{or} | Grease | Oil | | | d _s Min | D _s Max | r _s Max | | | | |
| 180 | 225 | 22 | 1.1 | 60.5 | 73.0 | 2400 | 3000 | 61836 | 1000836 | 186.5 | 218.5 | 1 | 2.030 | | | |
| | 250 | 33 | 2 | 110.0 | 119.0 | 2200 | 2800 | | | 61936 | 1000936 | 189 | 241 | 2 | 4.760 | |
| | 280 | 31 | 2 | 188.9 | 198.7 | 2000 | 2600 | | | 16036 | 7000136 | 189 | 271 | 2 | 6.490 | |
| | 280 | 46 | 2.1 | 189.0 | 199.0 | 2000 | 2600 | 6036 | 136 | 191 | 269 | 2 | 8.800 | | | |
| | 320 | 52 | 4 | 227.0 | 241.0 | 1800 | 2200 | 6236 | 236 | 196 | 304 | 3 | 15.10 | | | |
| | 380 | 75 | 4 | 355.0 | 405.0 | 1600 | 2000 | 6336 | 336 | 196 | 364 | 3 | 35.60 | | | |
| | 190 | 240 | 24 | 1.5 | 73.0 | 88.0 | 2200 | 2800 | 61838 | 1000838 | 198 | 232 | 1.5 | 2.620 | | |
| | | 260 | 33 | 2 | 117 | 133 | 2200 | 2800 | | | 61938 | 1000939 | 199 | 251 | 2 | 4.980 |
| | | 290 | 31 | 2 | 145.5 | 160.0 | 2000 | 2600 | | | 16038 | 7000138 | 199 | 281 | 2 | 6.770 |
| | | 290 | 46 | 2.1 | 172.0 | 187.0 | 2000 | 2600 | 6038 | 138 | 201 | 279 | 2 | 9.180 | | |
| 340 | | 55 | 4 | 255.0 | 281.0 | 1700 | 2000 | 6238 | 238 | 206 | 324 | 3 | 18.20 | | | |
| 400 | | 78 | 5 | 378.0 | 439.0 | 1600 | 1900 | 6338 | 338 | 210 | 380 | 4 | 41.00 | | | |
| 200 | | 250 | 24 | 1.5 | 74.0 | 91.5 | 2200 | 2800 | 61840 | 1000840 | 208 | 242 | 1.5 | 2.730 | | |
| | 280 | 38 | 2.1 | 149 | 168.0 | 2000 | 2600 | 61940 | | | 1000940 | 211 | 269 | 2 | 7.100 | |
| | 310 | 34 | 2 | 167 | 191 | 1900 | 2400 | 16040 | | | 7000140 | 209 | 301 | 2 | 8.680 | |
| | 310 | 51 | 2.1 | 218.0 | 243.0 | 1900 | 2400 | 6040 | 140 | 211 | 299 | 2 | 11.90 | | | |
| | 360 | 58 | 4 | 269.0 | 310.0 | 1700 | 2000 | 6240 | 240 | 216 | 344 | 3 | 21.60 | | | |
| | 420 | 80 | 5 | 410.0 | 500.0 | 1500 | 1800 | 6340 | 340 | 220 | 400 | 4 | 46.30 | | | |



d 220~380mm

| d | Boundary dimensions (mm) | | | Basic load ratings (kN) | | Limiting speeds (r/min) | | Nominal numbers | Mounting dimensions (mm) | | | Reference mass (kg) |
|-----|--------------------------|----|---------|-------------------------|-----------------|-------------------------|------|-----------------|--------------------------|--------------------|--------------------|---------------------|
| | D | B | r (Min) | C _r | C _{0r} | Grease | Oil | | d _a Min | D _a Max | r _a Max | |
| 220 | 270 | 24 | 1.5 | 78 | 110 | 1900 | 2400 | 61844 | 228 | 262 | 1.5 | 3 |
| | 300 | 38 | 2.1 | 151 | 180 | 1900 | 2400 | 61944 | 231 | 289 | 2 | 8 |
| | 340 | 37 | 2.1 | 174 | 204 | 1800 | 2200 | 16044 | 231 | 329 | 2 | 11.2 |
| | 340 | 56 | 3 | 247 | 290 | 1800 | 2200 | 6044 | 233 | 327 | 2.5 | 18.5 |
| | 400 | 65 | 4 | 296 | 365 | 1500 | 1800 | 6244 | 236 | 284 | 3 | 37 |
| | 460 | 88 | 5 | 410 | 520 | 1300 | 1600 | 6344 | 240 | 440 | 4 | 72.5 |
| 240 | 300 | 28 | 2 | 108 | 150 | 1800 | 2200 | 61848 | 249 | 291 | 2 | 4.5 |
| | 320 | 38 | 2.1 | 159 | 200 | 1800 | 2200 | 61948 | 251 | 309 | 2 | 8.6 |
| | 360 | 37 | 2.1 | 178 | 220 | 1700 | 2000 | 16048 | 251 | 349 | 2 | 14.5 |
| | 360 | 56 | 3 | 255 | 315 | 1700 | 2000 | 6048 | 253 | 347 | 2.3 | 19.5 |
| | 440 | 72 | 4 | 358 | 475 | 1300 | 1600 | 6248 | 256 | 424 | 3 | 51 |
| 260 | 320 | 28 | 2 | 111 | 163 | 1700 | 2000 | 61852 | 269 | 311 | 2 | 4.8 |
| | 360 | 46 | 2.1 | 212 | 270 | 1600 | 1900 | 61952 | 271 | 349 | 2 | 14.5 |
| | 400 | 44 | 3 | 238 | 310 | 1500 | 1800 | 16052 | 273 | 387 | 2.5 | 21.5 |
| | 400 | 65 | 4 | 291 | 375 | 1500 | 1800 | 6052 | 276 | 384 | 3 | 29.5 |
| | 480 | 80 | 5 | 390 | 530 | 1100 | 1400 | 6252 | 280 | 460 | 4 | 65.5 |
| 280 | 350 | 33 | 2 | 138 | 200 | 1600 | 1900 | 61856 | 289 | 341 | 2 | 7.4 |
| | 380 | 46 | 2.1 | 216 | 285 | 1500 | 1800 | 61956 | 291 | 169 | 2 | 15.5 |
| | 420 | 44 | 3 | 242 | 335 | 1400 | 1700 | 16056 | 293 | 407 | 2.3 | 23 |
| | 420 | 65 | 4 | 302 | 405 | 1400 | 1700 | 6056 | 296 | 404 | 3 | 31 |
| | 500 | 80 | 5 | 423 | 600 | 1100 | 1400 | 6256 | 300 | 480 | 4 | 71 |
| 300 | 380 | 38 | 2.1 | 172 | 245 | 1400 | 1700 | 61060 | 311 | 369 | 2 | 10.5 |
| | 420 | 56 | 3 | 270 | 375 | 1300 | 1600 | 61960 | 313 | 407 | 2.5 | 24.5 |
| | 460 | 50 | 4 | 286 | 405 | 1200 | 1500 | 16060 | 316 | 444 | 3 | 32 |
| | 460 | 74 | 4 | 358 | 500 | 1200 | 1500 | 6060 | 316 | 444 | 3 | 44 |
| 320 | 400 | 38 | 2.1 | 172 | 255 | 1300 | 1600 | 61864 | 331 | 389 | 2 | 11 |
| | 440 | 56 | 3 | 276 | 400 | 1200 | 1500 | 61964 | 333 | 427 | 2.5 | 25.5 |
| | 480 | 50 | 4 | 281 | 405 | 1100 | 1400 | 16064 | 336 | 464 | 3 | 34 |
| | 480 | 74 | 4 | 371 | 540 | 1100 | 1400 | 6064 | 336 | 464 | 3 | 46 |
| 340 | 420 | 38 | 2.1 | 178 | 275 | 1200 | 1500 | 61868 | 351 | 409 | 2 | 11.5 |
| | 460 | 56 | 3 | 281 | 425 | 1100 | 1400 | 61968 | 353 | 447 | 2.5 | 26.5 |
| | 520 | 57 | 5 | 346 | 520 | 1000 | 1300 | 16068 | 356 | 504 | 3 | 45 |
| | 520 | 82 | 6 | 423 | 640 | 1000 | 1300 | 6068 | 360 | 500 | 4 | 62 |
| 360 | 440 | 38 | 2.1 | 182 | 285 | 1100 | 1400 | 61872 | 371 | 429 | 2 | 12 |
| | 480 | 56 | 3 | 291 | 450 | 1100 | 1400 | 61972 | 373 | 467 | 2.5 | 28 |
| | 540 | 57 | 5 | 351 | 550 | 1000 | 1300 | 16072 | 376 | 524 | 3 | 49 |
| | 540 | 82 | 6 | 462 | 735 | 1000 | 1300 | 6072 | 380 | 520 | 4 | 64.5 |
| 380 | 480 | 46 | 2.1 | 242 | 390 | 1000 | 1300 | 61876 | 391 | 469 | 2 | 20 |
| | 520 | 65 | 4 | 338 | 540 | 1000 | 1300 | 61976 | 396 | 504 | 3 | 40 |
| | 560 | 57 | 5 | 377 | 620 | 950 | 1200 | 16076 | 396 | 544 | 3 | 51 |
| | 560 | 82 | 5 | 462 | 750 | 950 | 1200 | 6076 | 400 | 540 | 4 | 67.5 |



d 400~1000mm

| d | Boundary dimensions (mm) | | | Basic load ratings (kN) | | Limiting speeds (r/min) | | Nominal numbers | Mounting dimensions (mm) | | | Reference mass (kg) |
|------|--------------------------|-----|---------|-------------------------|-----------------|-------------------------|------|-----------------|--------------------------|--------------------|--------------------|---------------------|
| | D | B | r (Min) | C _r | C _{or} | Grease | Oil | | d _a Min | D _a Max | r _a Max | |
| 400 | 500 | 46 | 2.1 | 247 | 405 | 1000 | 1000 | 61880 | 411 | 489 | 2 | 20.5 |
| | 540 | 65 | 4 | 345 | 570 | 950 | 950 | 61980 | 416 | 524 | 3 | 41.5 |
| | 600 | 90 | 5 | 520 | 865 | 900 | 900 | 6080 | 420 | 580 | 4 | 87.5 |
| 420 | 520 | 46 | 2.1 | 251 | 425 | 950 | 1200 | 61884 | 431 | 509 | 2 | 21.5 |
| | 560 | 65 | 4 | 351 | 600 | 900 | 1100 | 61984 | 436 | 544 | 3 | 43 |
| | 620 | 90 | 5 | 507 | 880 | 900 | 1100 | 6084 | 440 | 600 | 4 | 91.5 |
| 440 | 540 | 46 | 2.1 | 255 | 440 | 900 | 1100 | 61888 | 451 | 529 | 2 | 22.5 |
| | 600 | 74 | 4 | 410 | 720 | 900 | 1100 | 61988 | 456 | 584 | 3 | 60.5 |
| | 650 | 94 | 6 | 553 | 965 | 850 | 1000 | 6088 | 466 | 624 | 5 | 105 |
| 460 | 580 | 56 | 3 | 319 | 570 | 900 | 1100 | 61892 | 473 | 567 | 2.5 | 35 |
| | 620 | 74 | 4 | 423 | 750 | 650 | 1000 | 61992 | 476 | 604 | 3 | 62.5 |
| | 680 | 100 | 6 | 582 | 1,060 | 800 | 950 | 6092 | 486 | 654 | 5 | 120 |
| 480 | 600 | 56 | 3 | 325 | 600 | 850 | 1000 | 61896 | 493 | 587 | 2.5 | 36.5 |
| | 650 | 78 | 5 | 449 | 815 | 800 | 950 | 61996 | 500 | 630 | 4 | 74 |
| | 700 | 100 | 6 | 618 | 1,140 | 750 | 900 | 6096 | 506 | 674 | 5 | 125 |
| 500 | 620 | 56 | 3 | 332 | 620 | 800 | 950 | 618/500 | 513 | 607 | 2.5 | 37.5 |
| | 670 | 78 | 5 | 452 | 865 | 750 | 900 | 619/500 | 520 | 650 | 4 | 77 |
| | 720 | 100 | 6 | 605 | 1,140 | 750 | 900 | 60/500 | 526 | 694 | 5 | 135 |
| 530 | 650 | 56 | 3 | 332 | 655 | 750 | 900 | 618/530 | 543 | 637 | 2.5 | 39.5 |
| | 710 | 82 | 5 | 488 | 930 | 700 | 850 | 619/530 | 550 | 690 | 4 | 90.5 |
| | 780 | 112 | 6 | 650 | 1,270 | 670 | 800 | 60/530 | 556 | 754 | 5 | 185 |
| 560 | 680 | 56 | 3 | 345 | 695 | 700 | 850 | 618/560 | 573 | 667 | 2.5 | 42 |
| | 750 | 85 | 5 | 494 | 980 | 670 | 800 | 619/560 | 580 | 730 | 4 | 105 |
| | 820 | 115 | 6 | 663 | 1,470 | 630 | 750 | 60/560 | 586 | 794 | 5 | 210 |
| 600 | 730 | 60 | 3 | 364 | 765 | 670 | 800 | 618/600 | 613 | 717 | 2.5 | 52 |
| | 800 | 90 | 5 | 585 | 1,220 | 630 | 750 | 619/600 | 620 | 780 | 4 | 125 |
| | 630 | 780 | 69 | 4 | 442 | 965 | 630 | 750 | 618/630 | 646 | 764 | 3 |
| 850 | | 110 | 6 | 624 | 1,340 | 600 | 700 | 619/630 | 656 | 824 | 5 | 160 |
| 920 | | 128 | 7.5 | 819 | 1,760 | 560 | 670 | 60/630 | 663 | 887 | 6 | 285 |
| 670 | 820 | 69 | 4 | 442 | 1,000 | 560 | 670 | 618/670 | 686 | 804 | 3 | 77.5 |
| | 900 | 103 | 6 | 676 | 1,500 | 530 | 630 | 619/670 | 696 | 874 | 5 | 185 |
| | 980 | 136 | 7.5 | 904 | 2,040 | 500 | 600 | 60/670 | 703 | 947 | 6 | 345 |
| 710 | 870 | 74 | 4 | 475 | 1,100 | 530 | 630 | 618/710 | 726 | 854 | 3 | 93.5 |
| | 950 | 106 | 6 | 663 | 1,500 | 500 | 600 | 619/710 | 736 | 924 | 5 | 220 |
| | 1030 | 140 | 7.5 | 956 | 2,200 | 560 | 560 | 60/710 | 743 | 997 | 6 | 375 |
| 750 | 920 | 78 | 5 | 527 | 1,250 | 500 | 600 | 618/750 | 770 | 900 | 4 | 110 |
| | 1000 | 112 | 6 | 761 | 1,800 | 480 | 560 | 619/750 | 776 | 974 | 5 | 255 |
| 800 | 980 | 82 | 5 | 559 | 1,370 | 450 | 530 | 618/800 | 820 | 960 | 4 | 130 |
| 850 | 1030 | 82 | 5 | 559 | 1,430 | 430 | 500 | 618/850 | 870 | 1010 | 4 | 140 |
| 900 | 1090 | 85 | 5 | 618 | 1,600 | 380 | 450 | 618/900 | 920 | 1070 | 4 | 160 |
| 1000 | 1220 | 100 | 6 | 637 | 1,800 | 340 | 400 | 618/1000 | 1026 | 1194 | 5 | 245 |